

**DECISION
AND
FINDING OF NO SIGNIFICANT IMPACT**

**ENVIRONMENTAL ASSESSMENT – WHITE-TAILED DEER DAMAGE MANAGEMENT AT
FEDERAL FACILITIES AND AIRPORTS IN WEST VIRGINIA AND STATEWIDE DISEASE
SURVEILLANCE ACTIVITIES**

I. PURPOSE OF THE EA

The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) program has prepared an Environmental Assessment (EA) to analyze the potential environmental and social impacts to the quality of the human environment from resolving damage and threats associated with white-tailed deer (*Odocoileus virginianus*) to agricultural resources, property, natural resources, and human safety at federal facilities and airports in West Virginia (USDA 2009)¹. The EA documents the need for deer damage management in the State and assesses potential impacts on the human environment of three alternatives to address that need. WS' proposed action in the EA would continue an integrated damage management program to fully address the need to manage damage associated with deer while minimizing impacts to the human environment.

The EA evaluated the issues and alternatives associated with WS' potential participation in managing damage and threats caused by white-tailed deer occurring at federal facilities and airports, as well as evaluated WS' proposed participation in the surveillance and monitoring of diseases associated with deer in the State. The EA was prepared by WS in consultation with the West Virginia Division of Wildlife Resources (WVDNR) and the West Virginia Department of Agriculture (WVDA) to determine if the proposed action could have a significant impact on the quality of the human environment.

The EA was prepared to: 1) facilitate planning and interagency coordination, 2) streamline program management, 3) evaluate the potential environmental consequences of the alternatives related to the issues of managing damage caused by deer, and 4) clearly communicate to the public the analysis of individual and cumulative impacts.

II. NEED FOR ACTION

The need for action to manage damage and threats associated with deer in West Virginia arises from requests for assistance² received by WS to reduce and prevent damage associated with deer from occurring to four major categories: agricultural resources, natural resources, property, and threats to human safety. Deer can pose threats to human safety and property from being struck by airplanes and by vehicles. Damage caused by deer also occurs from the consumption of resources that can lead to economic losses in West Virginia.

WS' activities would only be conducted on fenced federal properties and airports when requested by those entities when damage is occurring to agricultural resources, natural resources, property, or posing a threat to human safety. WS may also be requested to participate in disease surveillance and monitoring in the event of a disease outbreak or potential outbreak in the deer population.

¹Copies of the EA are available for review from the State Director, USDA/APHIS/WS, 730 Yokum Street, Elkins, WV 26241 or by visiting the APHIS website at http://www.aphis.usda.gov/wildlife_damage/nepa.shtml.

² WS only conducts deer damage management after receiving a request for assistance. Before initiating deer damage activities, a Memorandum of Understanding, cooperative service agreement, or other comparable document must be signed between WS and the cooperating entity which lists all the methods the property owner or manager will allow to be used on property they own and/or manage.

III. RELATIONSHIP OF THE EA TO OTHER ENVIRONMENTAL DOCUMENTS

WS has developed a programmatic Final Environmental Impact Statement (FEIS) that addresses the need for wildlife damage management (USDA 1997). The FEIS contains a detailed discussion of the potential impacts to the human environment from wildlife damage management methods and techniques employed by WS, including methods used to manage damage associated with deer. Pertinent information in the FEIS has been incorporated into the EA and this Decision by reference.

IV. DECISIONS TO BE MADE

Based on the scope of the EA, the decisions to be made are: 1) should WS conduct white-tailed deer damage management at fenced federal facilities and airports to alleviate damage to agriculture, property, natural resources, and human health and safety, 2) should WS conduct disease surveillance and monitoring in the deer population when requested by the WVDNR, 3) should WS implement an integrated wildlife damage management strategy (proposed action), including technical assistance and direct control, to meet the need for white-tailed deer damage management in West Virginia, 4) if not, should WS attempt to implement one of the alternatives to an integrated damage management strategy as described in the EA, and 5) would the proposed action result in adverse impacts to the environment requiring the preparation of an Environmental Impact Statement (EIS).

V. SCOPE OF ANALYSIS

This EA evaluates white-tailed deer damage management as conducted by WS to reduce threats to human safety and to resolve damage to property, natural resources, and agricultural resources wherever such management is requested by a cooperator. Due to State law, WS' activities will be limited to requests for assistance received from fenced, federal facilities and airports. At the request of the WVDNR, WS may participate as authorized agents of the WVDNR in activities involving surveillance and sampling of deer for the purposes of studying, containing, and curtailing disease outbreaks. The analyses in this EA are intended to apply to any action that may occur *in any locale* and at *any time* within West Virginia.

VI. PUBLIC INVOLVEMENT

The pre-decisional EA³ was made available to the public for review and comment by a legal notice published for three consecutive days in the *Charleston Gazette* beginning on June 15, 2009. A notice of availability and the pre-decisional EA were also made available for public review and comment on the APHIS website at http://www.aphis.usda.gov/wildlife_damage/nepa.shtml beginning on June 10, 2009. A letter of availability was also mailed directly to agencies, organizations, and individuals with probable interest in deer damage management in the State. The public involvement process ended on July 17, 2009. WS received one comment letter during the public involvement period in support of the proposed action. The comment letter was reviewed for substantive issues and alternatives which were considered in developing this Decision for the EA.

VII. AUTHORITY AND COMPLIANCE

WS is authorized by law to reduce damage caused by wildlife through the Act of March 2, 1931 (46 Stat. 1468; 7 U.S.C. 426-426b), as amended and the Act of December 22, 1987 (101 Stat. 1329-331, 7 U.S.C.

³Before a Decision for the EA is issued, the EA is considered pre-decisional. After the development of the EA by WS and consulting agencies and after public involvement in identifying new issues and alternatives, WS issues a Decision. Based on the analysis in the EA after public involvement, a decision is made to either publish a Notice of Intent to prepare an Environmental Impact Statement or a Finding of No Significant Impact will be noticed to the public in accordance to the NEPA, the Council of Environmental Quality regulations, and APHIS' NEPA implementation regulations.

426c). The authority for management of resident wildlife species is the responsibility of the WVDNR. The WVDNR collects and compiles information on white-tailed deer population trends and take, and uses this information to manage deer populations. This information has been provided to WS to assist in the analysis of potential impacts of WS' activities on the white-tailed deer herd in West Virginia. The existing crop damage permit system in the State allows the Law Enforcement Section of the WVDNR to regulate deer take for damage management purpose.

This EA and this Decision ensures WS' actions comply with the National Environmental Policy Act (NEPA), with the Council on Environmental Quality (40 CFR 1500), and with APHIS' NEPA implementing regulations (7 CFR 372). All deer damage management activities, including disposal requirements, would be conducted consistent with federal, State, and local laws, regulations, and policies.

VIII. AFFECTED ENVIRONMENT

Under the existing crop damage permitting system administered by the WVDNR, WS would conduct deer damage management activities on fenced federal properties and airports, including military bases, when requested by those entities. WS would conduct deer damage management activities as authorized agents of the WVDNR on those properties to alleviate damage and threats. At the request of the WVDNR, WS could also participate in disease surveillance and monitoring for the purposes of studying, containing, and curtailing disease outbreaks in the deer population throughout the State, wherever those outbreaks or potential outbreaks occur. Disease monitoring and surveillance activities could be conducted on State, county, municipal, and federal natural resource areas, park lands, and historic sites; state and interstate highways and roads; railroads and their right-of-ways; property in or adjacent to subdivisions, businesses, and industrial parks; timberlands, croplands, and pastures; and public and private properties in rural/urban/suburban areas.

IX. ISSUES ADDRESSED IN THE ANALYSIS OF ALTERNATIVES

Issues related to deer damage management were initially defined and preliminary alternatives were identified through consultation with the WVDNR and the WVDA. The pre-decisional EA was made available to the public for review and comment through notices published in local media and through direct notification of interested parties. Comments from the public involvement process were reviewed for substantive issues and alternatives which were considered in developing this Decision for the EA.

The EA describes in detail the issues considered and evaluated in Chapter 2 (USDA 2009). The following issues were identified as important to the scope of the analysis (40 CFR 1508.25) with each alternative evaluated in the pre-decisional EA relative to the impacts on the major issues:

- Issue 1 - Effects of WS' Activities on White-tailed Deer Populations
- Issue 2 - Effects on Non-target Species' Populations, including T&E Species
- Issue 3 - Effects of Management Methods on Human Health and Safety
- Issue 4 - Humaneness of Damage Management Methods
- Issue 5 - Effects on the Aesthetic Values of Target Species
- Issue 6 - Effects on Regulated White-tailed Deer Hunting

X. ISSUES CONSIDERED BUT NOT IN DETAIL

In addition to those issues analyzed in detail, several issues were identified during the development of the EA but were not considered in detail. The rationale for the decision not to analyze those issues in detail is discussed in the EA. Those issues not analyzed in detail were:

- WS' Impact on Biodiversity
- Appropriateness of Preparing an EA for Such a Large Area
- Effectiveness of Deer Damage Management Methods
- A Loss Threshold Should Be Established Before Allowing Lethal Methods
- Wildlife Damage Management Should Not Occur At Taxpayer Expense
- Cost Effectiveness of Deer Damage Management
- Deer Damage Should Be Managed By Private Nuisance Wildlife Control Agents
- Effects on Human Health from Consumption of Donated Deer Meat
- Effects from the Use of Lead Ammunition in Firearms

XI. ALTERNATIVES THAT WERE FULLY EVALUATED

The following three alternatives were developed to respond to the issues identified in Chapter 2 of the EA (USDA 2009). A detailed discussion of the effects of the alternatives on the issues is described in the EA; below is a summary of the alternatives.

Alternative 1: No Deer Damage Management by WS

Under the no involvement alternative, WS would not be involved with any aspect of deer damage management activities in West Virginia. All requests for assistance received by WS would be referred to the WVDNR. The WVDNR could continue to issue depredation permits for the take of deer when damage or threats were occurring. Most of the methods under this alternative to alleviate deer damage and threats would be available under any of the alternatives.

Alternative 2: Non-lethal Deer Damage Management only by WS

This alternative would require WS to address damage and threats associated with deer using non-lethal methods only. All requests for damage management involving lethal methods would be referred to the WVDNR. The WVDNR could continue to issue depredation permits to lethally take deer under this alternative. Most of the methods discussed in the EA would continue to be available for use by those experiencing deer damage and threats. Only WS would be restricted to the use of non-lethal methods under this alternative.

Alternative 3: Integrated Deer Damage Management Program (No Action/Proposed Action)

The proposed action would continue the current program of employing an integrated damage management approach using effective methods, as appropriate, to reduce conflicts associated with deer in the State. An integrated damage management strategy would be recommended and used, encompassing the use of practical and effective methods of preventing or reducing damage while minimizing harmful effects of damage management measures on people, other species, and the environment. Non-lethal methods would be given first consideration in the formulation of each damage management strategy, and would be recommended or implemented when practical and effective before recommending or implementing lethal methods. However, non-lethal methods would not always be applied as a first response to each damage problem. The most appropriate response could often be a combination of non-lethal and lethal methods, or there could be instances where application of lethal methods alone would be the most appropriate strategy.

XII. ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

Additional alternatives were also evaluated but not considered in detail in the EA (USDA 2009). The alternatives analyzed but not in detail include:

- Live Trapping and Relocation
- Population Management through Reproductive Inhibitors
- Non-lethal Methods Required Before Lethal Methods
- Compensation for Deer Damage
- Lethal Deer Damage Management only by WS

XIII. MINIMIZATION MEASURES AND STANDARD OPERATING PROCEDURES

Minimization measures are any features of an action that serves to prevent, reduce, or compensate for impacts that otherwise might result from that action. The current WS' program, nationwide and in West Virginia, uses many such minimization measures and these are discussed in detail in Chapter 5 of WS' programmatic FEIS (USDA 1997) and in Chapter 3 of the EA (USDA 2009). These minimization measures will be incorporated into activities conducted by WS when addressing deer damage and threats in West Virginia.

XIV. ENVIRONMENTAL CONSEQUENCES FOR ISSUES ANALYZED IN DETAIL

The EA analyzes the environmental consequences of each alternative in relation to the issues identified to provide information needed for making informed decisions in selecting the appropriate alternative to address the need for action. The following resource values in West Virginia are not expected to be significantly impacted by any of the alternatives analyzed in the EA: soils, geology, minerals, water quality/quantity, flood plains, wetlands, critical habitats (areas listed in T&E species recovery plans), visual resources, air quality, prime and unique farmlands, aquatic resources, timber, and range.

Chapter 4 of the EA analyzes the environmental consequences of each alternative in comparison to determine the extent of actual or potential impacts on those issues. The proposed action/no action alternative serves as the baseline for the analysis and the comparison of expected impacts among the alternatives. The analysis also takes into consideration mandates, directives, and the procedures of WS, the WVDNR, and the WVDA.

The analyses in Chapter 4 of the EA indicate the potential impacts to the quality of the human environment would be similar across the alternatives. Deer that could be taken by WS under the proposed action could be taken by those persons experiencing damage or threats in the absence of WS' direct involvement since the WVDNR could issue depredation permits to alleviate damage or threats. Since the lack of WS' direct involvement does not preclude the taking of deer by those persons experiencing damage or threats associated with deer, WS' involvement in the taking of those deer under the proposed action would not be additive to those deer that could be taken by other entities in the absence of WS' involvement. In addition, most non-lethal and lethal methods available for resolving damage or threats associated with deer would be available under any of the alternatives. Therefore, WS' use of those methods would not be additive to the environmental status quo since those methods could be employed by any entity experiencing damage that has received a depredation permit issued by the WVDNR.

Deer can be taken in West Virginia during a regulated hunting season established by the WVDNR. In 2007, the WVDNR estimated the number of deer killed during the regulated season to be 145,937 deer. West Virginia hunters have harvested nearly 1.5 million deer between 2000 and 2007 during the regulated harvest season. In addition to take occurring during the regulated season, deer populations are also

regulated by other factors. Mortality also occurs from vehicle collisions, dogs, illegal take, tangling in fences, depredation permits, disease, and other causes (Crum 2003).

Under the proposed action, based on a review of previous activities conducted by WS and in anticipation of an increase in requests for lethal take, WS anticipates that future lethal take will not exceed 1,000 deer annually. In addition, WS may be requested by the WVDNR and/or the WVDA to assist with sampling and managing the spread of diseases found in free-ranging and/or captive deer populations. In the case of a disease outbreak, WS could lethally take up to 1,500 additional white-tailed deer for sampling and/or to prevent further spread of diseases. Therefore, WS' total annual take would not exceed 2,500 deer annually under the proposed action. Any take of deer by WS in West Virginia must be authorized and permitted by the WVDNR.

Since deer harvest levels and other mortality events fluctuate annually in the State, the analysis of impacts of WS' take on the statewide deer population under the proposed action was evaluated using several scenarios. Under a worst case scenario, a total of 2,500 deer could be taken by WS annually under the proposed action and would represent the highest level of annual take that could occur by WS in a given year. The analyses in the EA evaluated a take of 2,500 deer to determine the maximum possible impact to the statewide deer population. The analyses in the EA showed that if take by WS had reached 2,500 deer during the year with the highest known mortality (*e.g.*, hunting, vehicle collisions) of deer in the State, WS' take of 2,500 deer would have represented 0.6% of the total known mortality that had occurred in the State. If WS' take reached 2,500 deer during the lowest known mortality of deer in the State, WS' take of 2,500 deer would have represented 1.2% of the total statewide mortality.

Under good habitat conditions, the population of deer in the State is expected to increase 30 to 40 percent annually in the absence of management through a harvest season (Evans et al. 1999). The deer population in West Virginia in 2006 was estimated at 784,000 deer (J. Crum, WVDNR, pers. comm. 2007). The EA determined that the take of deer from all known sources in 2006 represented 20.3% of the deer population. If WS had taken 2,500 deer in 2006 when combined with the total known mortality in the State during 2006, would have represented 20.7% of the population which is an increase of 0.4% when compared to the total mortality in 2006 if no take by WS had occurred (*i.e.*, 20.3% without take by WS compared to 20.7% if WS' take had been 2,500 deer in 2006). When compared to the estimated statewide deer population in 2006, take of 2,500 deer by WS would have represented 0.3% of the deer population in West Virginia under a worst case scenario.

Since deer can be taken to alleviate damage through the issuance of depredation permits by the WVDNR (58 CSR 15), those deer taken by WS would likely be removed by those experiencing damage or threats since they could obtain permits for the lethal take of deer. WS' deer damage management activities are carried out under a depredation permit issued by the WVDNR to a property owner and/or manager or directly to WS to conduct deer damage management activities for a property owner and/or manager. Therefore, WS' activities are removing deer that the property owner and/or manager could remove themselves under depredation permits but has chosen to request assistance from WS. Even in the event of a disease threat, those deer that would be taken by WS would likely be taken whether WS was directly involved or not. Therefore, WS' activities under the proposed action would not likely be additive to the mortality that already occurs under depredation permits and that could occur during disease threats. The potential impacts to the statewide deer population under the proposed action would likely be similar to the other alternatives given that WS' activities would not substantially increase the take that could occur in the absence of WS' direct involvement since take could occur when permitted by the WVDNR. The deer that could be taken by WS under the proposed action are likely those deer that would be taken by other entities when permitted by the WVDNR in the absence of WS' direct involvement in the activities.

The magnitude of WS' activities to alleviate damage and threats associated with deer in the State would be low with the oversight and permitting of WS' activities occurring by the WVDNR. If take by WS had reached 2,500 deer during 2005 when the lowest known deer mortality occurred in the State, WS' take would have represented 1.2% of the total known mortality. In 2006, if WS' take had reached 2,500, the total known mortality would have increased only 0.4% when compared to the total known mortality if 2,500 deer had not be taken by WS. Based on the 2006 deer population estimate, a take of up to 2,500 by WS would have represented 0.3% of the estimated population. Based on those worst case scenarios, WS' take of up to 2,500 deer under the proposed action would be insignificant when compared to the estimated population and the total known mortality. WS will annually report to the WVDNR and annually monitor take to ensure WS' activities do not adversely affect deer. The permitting of all WS' take by the WVDNR ensures WS' take will meet the objectives of the State's operational deer plan.

XV. CUMULATIVE IMPACTS OF THE PROPOSED ACTION

No significant cumulative environmental impacts are expected from any of the three alternatives, including the proposed action. Under the proposed action, the lethal removal of deer by WS would not have significant impacts on statewide deer populations. No risk to public safety is expected when activities are provided and accepted by requesting individuals in Alternative 1, Alternative 2, and Alternative 3 since only trained and experienced personnel would conduct and recommend damage management activities. There is a slight increased risk to public safety when persons who reject assistance and recommendations and conduct their own activities, and when no assistance is provided in Alternative 1. In all Alternatives, however, it would not be to the point that the impacts would be significant. Although some persons will likely be opposed to deer damage management activities in the State, the analysis in this EA indicates that an integrated approach to management damage and threats caused by deer will not result in significant cumulative adverse impacts on the quality of the human environment.

XVI. DECISION AND RATIONALE

Based on the analyses of the alternatives developed to address those issues in the EA, including individual and cumulative impacts of those alternatives, the following decision has been reached:

Decision

I have carefully reviewed the EA prepared for this proposal and the input from the public involvement process. I find the proposed program to be environmentally acceptable, addressing the issues and needs while balancing the environmental concerns of management agencies, landowners, advocacy groups, and the public. The analyses in the EA adequately addresses the identified issues which reasonably confirm that no significant impact, individually or cumulatively, to wildlife populations or the quality of the human environment are likely to occur from the proposed action, nor does the proposed action constitute a major federal action. Therefore, the analysis in the EA remains valid and does not warrant the completion of an EIS.

Based on the analyses in the EA, the issues identified are best addressed by selecting Alternative 3 (Proposed Action/No Action) and applying the associated mitigation measures discussed in Chapter 3 of the EA. Alternative 3 successfully addresses (1) deer damage management using a combination of the most effective methods and does not adversely impact the environment, property, human safety, and/or non-target species, including threatened and endangered species; (2) it offers the greatest chance of maximizing effectiveness and benefits to resource owners and managers while minimizing cumulative impacts on the quality of the human environment that might result from the program's effect on target and non-target species populations; (3) it presents the greatest chance of maximizing net benefits while

minimizing adverse impacts to public health and safety; and (4) it offers a balanced approach to the issues of humaneness and aesthetics when all facets of those issues are considered. Further analysis would be triggered if changes occur that broaden the scope of deer damage management activities in the State, that affect the natural or human environment, or from the issuance of new environmental regulations. Therefore, it is my decision to implement the proposed action (Alternative 3) as described in the EA.

Finding of No Significant Impact

Based on the analyses provided in the EA, there are no indications that the proposed action (Alternative 3) will have a significant impact, individually or cumulatively, on the quality of the human environment. I agree with this conclusion and therefore, find that an EIS should not be prepared. This determination is based on the following factors:

1. Deer damage management as conducted by WS in the State is not regional or national in scope.
2. The proposed action would pose minimal risk to public health and safety. Risks to the public from many of the methods described in the EA were determined to be low in a formal risk assessment (USDA 1997).
3. There are no unique characteristics such as park lands, prime farm lands, wetlands, wild and scenic areas, or ecologically critical areas that would be significantly affected. Built-in mitigation measures that are part of WS' standard operating procedures and adherence to laws and regulations will further ensure that WS' activities do not harm the environment.
4. The effects on the quality of the human environment are not highly controversial. Although there is some opposition to wildlife damage management, this action is not highly controversial in terms of size, nature, or effect.
5. Based on the analysis documented in the EA and the accompanying administrative file, the effects of the proposed damage management program on the human environment would not be significant. The effects of the proposed activities are not highly uncertain and do not involve unique or unknown risks.
6. The proposed action would not establish a precedent for any future action with significant effects.
7. No significant cumulative effects were identified through this assessment. The EA analyzed cumulative effects of WS' deer damage management on target and non-target species populations and concluded that such impacts were not significant for this or other anticipated actions to be implemented or planned within West Virginia.
8. The proposed activities would not affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, nor would they likely cause any loss or destruction of significant scientific, cultural, or historical resources.
9. WS has determined that the proposed program would not adversely affect those threatened or endangered species in the State that were addressed in the Biological Opinion issued by the USFWS on WS' programmatic activities (USDA 1997). For those species listed in the State that were not addressed in the Biological Opinion or have been listed since the completion of the Biological Opinion, WS has determined the proposed action will have no effect on those species listed in the State.

10. The proposed action would be in compliance with all federal, State, and local laws.
11. No significant cumulative effects were identified by this assessment or other actions implemented or planned within the area.

Rationale

The rationale for this decision is based on several considerations. This decision takes into account public comments, social/political and economic concerns, public health and safety, and the best available science. The foremost considerations are that: 1) deer damage management will only be conducted by WS at the request of landowners/managers and only after a depredation permit has been issued by the WVDNR, 2) management actions are consistent with applicable laws, regulations, policies and orders, and 3) no adverse impacts to the environment were identified in the analysis. As a part of this Decision, the WS program in West Virginia will continue to provide effective and practical technical assistance and direct management techniques that reduce damage.



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8/13/09
Date

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